



MARKET UPDATE

January 31, 2018

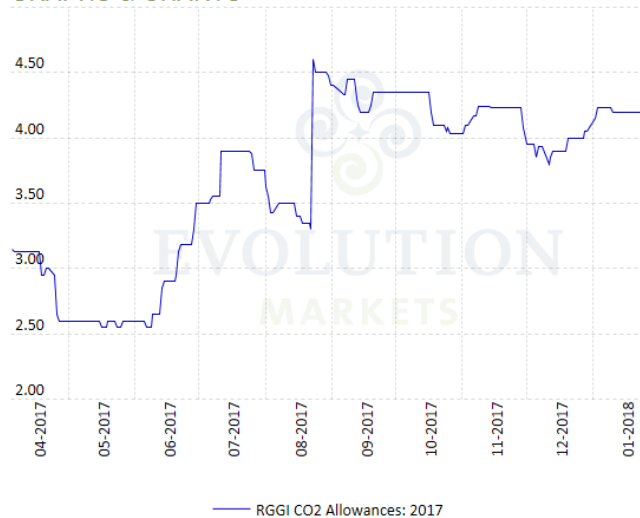
Regional Greenhouse Gas Initiative (RGGI)

Market Status

It is increasingly likely two new states will join RGGI. Newly elected New Jersey Governor Phil Murphy signed an executive order on January 29 to have the state re-join RGGI, and Virginia is considering joining RGGI in 2020. News of both New Jersey's and Virginia's (re)entry into RGGI has been expected for some time, but official announcements seem to have caused sellers pull back a bit to digest the news. The market in January traded flat, between \$4.20 and \$4.25 for January ICE delivery or Spot delivery.

Term	Bid	Offer
Spot	\$4.15	\$4.30
Dec 18 Cleared	\$4.25	\$4.40

GRAPHS & CHARTS



Program Review Summary

On December 19, 2017, RGGI published the results of their Program Review and released the 2017 Updated Model Rule. The summary is as follows: a.) an emissions cap of 75.15 million tons declining by 2.275 million tons per year to 2030; b.) a full 2020 bank adjustment over five years from 2021 to 2025; c.) creation of a Cost Containment Reserve (CCR) and an Emission Containment Reserve (ECR), the size each being 10% of the regional cap; d.) the ECR trigger price will be \$6.00 in 2021 and rise 7% per year; and e.) the CCR trigger price will be \$13.00 in 2021 and also rise 7% per year.

RGGI states are currently undergoing state-specific regulatory processes to implement the Updated Model Rule.

Fundamentals and Future Outlook

Calendar year 2017 RGGI Carbon emissions are estimated to be well below 70 million tons, as compared to 81 million tons in 2016. However, January has been extremely cold, and RGGI emissions look to hit a record monthly high. Based on estimated emissions, it is projected that the 2020 bank could be approximately 75 million allowances. Discounting New Jersey and Virginia joining RGGI, the program is projected go flat by 2025. Of course, higher or lower than anticipated emissions would change that projection. Layering in how New Jersey and Virginia impact the RGGI program, each states' initial allowance allocation will add an additional variable into when the RGGI Bank eventually goes flat.

In summary, it is reasonable to assume the RGGI price will trend to the ECR trigger price of \$6 in late 2020. As higher emissions would cause the bank to be depleted earlier than expected and put more demand into the market, actual emissions year-to-year will determine if the price moves higher than the ECR trigger price and towards the CCR price. Until then, it seems the RGGI price will be affected by the specifics of how New Jersey and Virginia will join RGGI, what each states' allocation will be, and seasonal emissions and the liquidity of supply.

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